IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

MIRROR WORLDS TECHNOLOGIES, LLC,	Civil Action No. 6:13-cv-419 (RWS)
Plaintiff,	**Jury Demanded**
vs.	
APPLE, INC., et al.,	
Defendants.	
MIRROR WORLDS TECHNOLOGIES, LLC,	Civil Action No. 6:13-cv-941 (RWS)
Plaintiff,	**Jury Demanded**
vs.	
DELL, INC., et al.,	
Defendants.	

Mirror Worlds' <u>Sur-Reply</u> to
Apple's Motion for Judgment on the Pleadings

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A	Refers to Apple's reply at dkt. 313

I.   *Mayo* **step 1.**

  A.   *Mayo* **step 1 requires starting with an accurate summary of the claims.**

The first step of *Mayo* is to "determine whether the claims at issue are directed to a

patent-ineligible abstract idea." *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1255

(Fed. Cir. 2014). In our response, we showed that this necessarily entails both (a) determining

what the asserted claims are "directed to," *i.e.*, accurately summarizing the claims, and

(b) assessing whether that summary is an "abstract idea." Apple agrees that the claim summary

used for step one must include the "core" concepts or "essence" of the claims. A2-3. Moreover,

Apple does not dispute our showing that when the core concepts are included, the claims "are

directed at using a persistent main stream and substreams to organize data units on a computer

system." MW 4-5. But Apple never assesses whether this claim summary constitutes an abstract

idea. Instead, Apple asserts that it is just "technical jargon" that means "organizing information

chronologically on a computer." A3. Apple is wrong.

  First, a term is "technical jargon" if it is well-known within a profession but not readily

understood by others. The terms "main stream" and "substream" are not technical jargon well-

known in the field. These were brand-new terms coined by the inventors to describe an entirely

new concept that is not merely "organizing information chronologically."

  Second, to generate a "main stream" does not mean to organize some information

chronologically.[1] It requires a time-ordered sequence of data units "inclusive of every data unit

received by or generated by the computer system" such that it "functions as a diary of a person or

an entity's electronic life" and is "designed to have three main portions: past, present, and

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[1]   Apple asserts that in the prior trial, "Mirror Worlds' own technical expert characterized the patents as 'address[ing] the problem of order – organizing and then finding your stuff, the files and the documents, on a computer.'" Apple at 3. This merely states the general problem addressed by the patent. It does not purport to summarize the solution found in the claims, much less does it state that a "main stream" is merely chronological ordering.

future." Dkt. 266 at 14-15. And, to also have persistent substreams means to filter data units from a main stream, such that the main stream and substreams both exist simultaneously and both are dynamically updated. *Id.* Accordingly, the accurate summary of the asserted claims on which the step 1 analysis must be performed is "using a persistent main stream and substreams to organize data units on a computer system."

> **B.** **As accurately summarized, the claims are not abstract.**

Apple asserts that "Mirror Worlds' arguments regarding novelty are misplaced in Mayo's step one." A8. However, our analysis did not address "novelty," which would have required an assessment of prior art under section 102. Instead, we demonstrated that the claims, properly summarized, did not recite "a fundamental economic or longstanding commercial practice," which is the required assessment under *Mayo* step 1. *DDR Holdings,* 773 F.3d at 1257 (The "asserted claims do not recite a mathematical algorithm. Nor do they recite a fundamental economic or longstanding commercial practice.").

There was no fundamental economic or longstanding practice of collecting every letter, memo, draft document, photo, slide show, calendar appointment, and audio or film recording, of user interest that someone received or generated; time-stamping them; and then maintaining these materials as a time-ordered sequence. Nor was there any practice of filtering out sub-collections of these materials while simultaneously keeping the main collection, all of which were persistently updated.

Apple points to the court docket and diary. A9-12 & 5. Neither example came close to the main stream and substream concept.

Court docket: A court's docket was not a "main stream" because it was not inclusive of every document of interest or significance received or generated by a court. It did not include data units that were not case-related (e.g. communications on bench bar meetings, committees,

etc.). It did not even contain every data unit that related to a particular case (*e.g.* draft orders or internal court staff communications, or communications between the court and the parties or others on procedural or logistical issues). It contained only those documents that were officially designated by a party or the court for entry in a formal case docket. Moreover, a court docket included entries only for a single case; it was not a single time-ordered collection of all docket entries for all cases.

Apple's only response is to assert "the court docket does include every document that is filed in ('received by') and every order that is issued in ('generated by') a particular litigation." A11. But that assertion merely establishes that a court docket was a far cry from a main stream. It did not contain every data unit received by a court; only a document "that is filed." It did not contain every data unit generated by the court; only an "order that is issued." It did not contain all data units for all cases and non-case matters; only those for "a particular litigation."

Nor did a court's docket have a "future" section. Contrary to Apple's suggestion, A9, a "scheduling order for future filings," was found in the docket only as a past entry, *i.e.* the date the order was entered. The dates in the order for future events were not time-stamped and entered in the docket as future dates in a "future" portion of the docket.

Diary: The concept of a diary as a record of events was well-understood. But before Dr. Gelernter, no one ever thought that the concept of a diary could be usefully applied to organizing all data units generated or received by a person or entity.[2] It was not a common or routine practice (to the contrary, it was unthinkable) to collect all materials of user interest (all letters,

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[2]   Apple asserts "the parties agreed in this case, a 'stream' is 'a diary,' and Mirror Worlds' predecessor conceded that a diary is an 'idea.'" A5. Both halves of this assertion are wrong. First, the parties did not agree that a stream "is a 'diary;'" that it "functions like a diary" is only one of a stream's attributes. Dkt. 266 at 15. Second, the testimony from Dr. Gelertner quoted by Apple does not purport to define all characteristics of a main stream; rather he explained one aspect of a stream by analogizing to a diary.

drafts, photos, audio recordings, etc.) received or generated by a person or entity and place them in a diary (*e.g.* by attaching them to a diary's pages like a scrapbook). Indeed, to one of ordinary skill at the time, that would have been a patently absurd approach to organization.

> **C.**   **Apple's "stream is abstract" argument fails.**

Apple asserts that a claim summary that includes the concept of a "stream" would be abstract because a "stream" means "something *entirely abstract and non-technical*." A4. This assertion is wrong at two levels.

First, it is improper to consider whether the individual elements of the summarized claims in isolation would constitute abstract ideas, rather than the summarized claim as a whole. *Digitech Image Technologies, LLC v. Electronics for Imaging*, Inc., 758 F.3d 1344, 1350 (Fed. Cir. 2014) ("In determining whether a process claim recites an abstract idea, we must examine the claim as a whole."). Under Apple's approach, *all* patents would be invalid. For example, in isolation, each of "a web page," "visual elements," "a host website," or "content of a third party merchant" would certainly not be eligible for patent protection. Yet, the Federal Circuit held that claims "directed to systems and methods of generating a composite web page that combines certain visual elements of a 'host' website with content of a third-party merchant" are patent-eligible. *DDR Holdings,* 773 F.3d at 1248, 1256-59.

Second, the stream is not "something entirely abstract and non-technical." A4. A "stream" as used in the claims consists of data units (*e.g.* digital files) received by or generated by a "computer system," which consists of hardware and software. Dkt. 266 at 14. Therefore, the stream comprises data units concretely embodied in computer memory.

> **D.**   **Apple's "methods of organization" argument fails.**

Apple asserts that "numerous courts have held that methods of organization are fundamental, abstract ideas" and suggests, therefore, that all methods of organization are abstract

ideas. A6. Apple is wrong.

None of the cases cited by Apple that found particular methods of organization to be abstract ideas did so because the court concluded that all methods of organization are abstract ideas. They did so because the particular claims claimed nothing more an abstract idea using conventional and routine steps. As we pointed out in our opposition brief, both the Federal Circuit and the Supreme Court have expressly rejected the proposition that all methods of organizing human activity were patent ineligible. MW 16-17. Moreover, in *Alice*, the Court expressly identified the characteristic of such a method that would make it an abstract idea: if it constituted a "'a fundamental economic practice long prevalent in our system of commerce.'" *Alice Corp. Pty. v. CLS Bank Int'l,* 134 S. Ct. 2347, 2356 (2014) (quoting *Bilski*, 561 U.S. at 599). As demonstrated above, the '227 patent does not claim a fundamental economic practice.

II.   *Mayo* step 2.

A.   Persistent main stream and substreams were not routine or conventional.

The use of a persistent main stream and substreams was not routine or conventional. Indeed, nothing like it was ever conceived of in the pre-computer world (or in the computer world) before Gelernter and Freeman came up with their inventions.

As discussed above, prior to computers, there simply was no practice of organizing all of the items received or generated by a person in any particular way, much less time-stamping each item and maintaining these materials in a time-ordered sequence in the way claimed by the '227 patent. It is inconceivable that any person or organization ever did this even once—much less was it a well-known, routine, and conventional practice. Nor was there any practice of filtering out sub-collections of these materials while simultaneously keeping the main collection, all of which were persistently updated.

Rather, the '227 patent claims a method that arises only in the realm of operating

systems, where a person's computer receives digital data in various formats (word documents, photos, power points, calendar appointments, emails, etc.), on a variety of subjects, relating to different time periods (past, present, and future), and which must be organized for later retrieval. This problem of organizing and retrieving digital data did not arise in the pre-computing world. And in the computing world, the undisputed evidence establishes that the main stream and substream solution was not routine or conventional. '227 at 3:62-63 ("the invention is a new model ... which uses a time-ordered stream as a storage model"); Plaintiff's Exh. 1, 2 ("the prior art fails to teach or suggest generating a main stream of data units and at least one substream").

B.   Apple's "time-based organization" argument fails.

Apple asserts that the claims fail *Mayo* step 2 because "the named inventor admits that time-based organization is well-understood and conventional." A13-14. This argument fails.

First, *Mayo* step 2 requires a consideration of "the elements of each claim both individually and 'as an ordered combination." *Alice*, 134 S. Ct. at 2355. It is improper to assess step 2 merely by considering in isolation only one narrow aspect of the claims ("time-based organization"). As discussed above, the use of a persistent main stream and substreams is not merely "time-based organization." Accordingly, any showing that "time-based organization" was conventional is irrelevant, because it does not address the actual claims.

Second, nothing in the testimony from Dr. Gelertner cited by Apple suggests that the use of main streams and substreams was routine or conventional. A13. He testified that using his invention is "intuitive and natural" because a "lifestream mirror[s] a persons' experience." Apple Ex 1, 127:5-20. But this in no way implies that, before the invention, streams were in use, much less that they were routine, well-known, and conventional.

In fact, the undisputed record evidence establishes that using persistent main streams and substreams to organize data on a computer was not routine, well-known, or conventional. The

patent expressly refutes the contention that streams were conventional and routine. '227 at 1:22-

2:6-7 ("conventional operating systems are not well suited to the needs of most users. … A

solution to these disadvantages is to use a document stream operating system."); 3:62-63 ("the

invention is a new model ... which uses a time-ordered stream as a storage model"); 2:12-16

("the present invention ... provide[s] a document stream operating system and method which

solves many, if not all, of the disadvantages of conventional operating systems").   Similarly, the

prosecution history expressly refutes Apple's contention that streams were conventional and

routine. *See, e.g.,* Plaintiff's Exh. 1, 2 ("the prior art fails to teach or suggest generating a main

stream of data units and at least one substream").

> **C.   Apple does not meet its burden of proving that the claim limitations were
> conventional and routine.**

Apple has the burden of proof by "clear and convincing evidence." *See State*

Contracting & Eng'g Corp. v. Condotte Am., Inc., 346 F.3d 1057, 1067 (Fed. Cir. 2003). "Fed.

R. Civ. P. 12(c) is designed to dispose of cases where the material facts are not in dispute and a

judgment on the merits can be rendered by looking to the substance of [a] the pleadings and [b]

any judicially noticed facts." *Hebert Abstract Co. v. Touchstone Props., Ltd.*, 914 F.2d 74, 76

(5th Cir. 1990) (*per curiam*). Accordingly, Apple must demonstrate, based on the substance of

(a) the pleadings and (b) any judicially noticed facts, the asserted claims include only "routine,

conventional activity." Both (a) and (b) demonstrate the opposite.

(a) pleadings: Apple included no facts pertaining to § 101 in its Answer and

Counterclaims. Dkt. 92.   Thus, only the '227 patent itself (attached as an exhibit to Plaintiff's

complaint, Dkt # 1-1) contains relevant facts. As shown above, the patent does not support, and

expressly refutes, the contention that streams were conventional and routine. '227 at 1:22-2:6-7

("conventional operating systems are not well suited to the needs of most users. … A solution to

these disadvantages is to use a document stream operating system."); 3:62-63; 2:12-16.

    (b) judicially noticeable facts: A court may take judicial notice of the prosecution

history. *Genetic Technologies Ltd. v. Bristol-Myers Squibb Co.*, No. CV 12-394-LPS, 2014 WL

5507637, at *3 (D. Del. Oct. 30, 2014). Like the patent itself, the prosecution history does not

support, and expressly refutes, Apple's contention that streams were conventional and routine.

See, e.g., Plaintiff's Exh. 1, 2 ("the prior art fails to teach or suggest generating a main stream of

data units and at least one substream").

    The record on the pleadings uniformly demonstrates that Apple cannot meet its burden.

III.   The claims are valid under *DDR Holdings*.

    We showed that the '227 claims are patent-eligible under the holding of *DDR Holdings*

because "the claimed solution is necessarily rooted in computer technology in order to overcome

a problem specifically arising in the realm of computer networks." *DDR Holdings,* 773 F.3d at

1257. MW9-11.

    Apple responds that the '227 claims addressed a problem that was not specific to

computers because "humans have grappled with alternative organizational schemes at least since

the invention of writing." A16. But the '227 streams approach has no applicability (indeed it

would be completely unworkable) for organizing pieces of paper. It addressed a set of problems

that arise with digital data that are different in kind and degree from the problems of organizing

paper, such as the requirement of naming each data unit, finding data units stored in a

hierarchical structure, lack of compatibility across data platforms, loss of historical context, and

difficulty archiving digital data. MW at 9-11. Apple ignores these computer-specific problems.[3]

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[3]   Moreover the inquiry under *DDR* is not focused on problems *analogous* to those
addressed by the patent (such as organizing paper); rather, it is focused on the *actual* problems
addressed by the patent. The problem addressed by the patent in *DDR* (retaining website
visitors) had a non-computer analog (maintaining customers with the "store within a store"

IV.   The claims cannot be performed entirely by a human.

Apple repeats the same argument made in Microsoft's Reply that the claims can be

performed without a computer. A9. Apple's arguments fail for the same reasons identified in

our reply to Microsoft's argument. *See* dkt. 326 at 8.

V.   Machine or transformation.

As explained in Plaintiff's opposition, the '227 claims also meet the machine-or-

transformation test. Apple's arguments in reply are rebutted in turn.

Machine. Apple asserts that the '227 patent does not meet this test because "merely using

a computer to perform more efficiently what could otherwise be accomplished manually does not

confer patent-eligibility." A18. This argument fails because, as demonstrated in Plaintiff's

opposition brief, the claims cannot be accomplished manually. MW at 14-16.

Transformation. Apple asserts that the transformation of data into a visual display is not a

"transformation," because "what the Federal Circuit was characterizing as 'transformation' [in

Abele] was in fact the transformation of real-world data derived from X-rays into a visual

depiction of a human's bones and tissue."   A18-19. Apple's argument fails because transforming

real-world data into a visual depiction is exactly what the claims do here–the claims transform

data that represents tangible information (such as letters, photos, videos, etc.) into a visual

depiction that shows the data units in a stack. Thus, it meets the transformation test.

**VI.   The Court can and should grant Mirror World's motion for judgment on the
         pleadings; alternatively, the Court should deny both motions.**

Apple does not contend that it can plead additional facts or proffer evidence (*e.g.* expert

testimony) showing that the use of streams was conventional and routine, or argue the matter

should not be resolved against it at the pleadings stage. Thus, Apple's motion for judgment on

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concept), but the argument that this analog should render the patents ineligible was explicitly
rejected. *DDR Holdings,* 773 F.3d at 1258.

the pleadings can and should be denied, and Plaintiff's cross-motion should be granted.

By contrast, Mirror Worlds specifically asserts that the facts in the pleadings and the facts that can be judicially noticed establish that the claims include limitations that are not conventional or routine. Mirror Worlds further asserts that it can support those facts with additional extrinsic evidence, including expert testimony. Therefore, if for any reason the Court believes it cannot grant judgment on the pleadings in favor of Mirror Worlds, the Court should deny the motion and cross-motion, without prejudice to Mirror Worlds re-urging its motion at the summary judgment stage. *See Hebert Abstract*., 914 F.2d at 76 ("Fed. R. Civ. P. 12(c) is designed to dispose of cases where the material facts are not in dispute and a judgment on the merits can be rendered by looking to the substance of the pleadings and any judicially noticed facts.").

Moreover, if the Court were to consider the materials submitted by Apple outside the pleadings (which should not be considered under Rule 12), Apple's motion "must be treated as one for summary judgment under Rule 56." Fed. R. Civ. Pro. 12(d). If so, Apple's motion should be denied as premature. Fact discovery is ongoing, expert discovery has not begun, and Plaintiff anticipates that expert testimony will show that the use of persistent streams and substreams on a computer system was non-conventional and non-routine. If a Rule 12(c) motion is considered as a motion for summary judgment, Plaintiff "must be given a reasonable opportunity to present all the material that is pertinent to this motion." *Id.*   In addition, summary judgment motion is premature for failure to comply with the Court's Docket Control Order, which requires the filing of a letter brief 60 days prior to the motion. Dkt. 155 n. 2.

VII.   Conclusion.

Thus, Apple's motion for judgment on the pleadings should be denied, and Plaintiff's cross-motion granted. In the alternative, both motions should be denied without prejudice.

Date: April 7, 2015

Respectfully submitted,

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